Stephen M. Parey, et al., inventors

Serial No. 10/791,991 Filed March 2, 2004

Page 2 of 16

In the Specification:

Please replace pages 4-7 as follows:

--must be modified so that the door opening can be varied in size to accommodate larger

width compartments and also smaller width compartments.

SUMMARY OF THE INVENTION

The first basic embodiment of tool vending machine of the present invention

utilizes a housing having a sidewall which encloses an internal chamber. A door is mounted

in the sidewall with the door being located within a door opening formed in the sidewall. The

door is pivotally movable relative to the housing. At least one first compartment is located

within the internal chamber and at least one second compartment is located within the

internal chamber. The second compartment is defined as being larger in size than the first

compartment. A moving means <u>drive mechanism</u> is included for moving the first

compartment and the second compartment with this moving means drive mechanism being

located within the internal chamber. The moving means drive mechanism is to move the first

compartment and the second compartment to be located directly adjacent the door to permit

manual access into the compartment by opening of the door. Only a single compartment is

to be aligned with the door at a time. A user interface tool selection means is incorporated

Stephen M. Pixley, et al., inventors

Serial No. 10/791,991

Filed March 2, 2004

Page 3 of 16

that is mounted on the sidewall of the housing. The selection means permits manual

selection of either the first compartment or the second compartment to be moved to be in

alignment with the door. The door also includes a baffle means with this baffle means also

being mounted within the internal chamber. The baffle means is to be movable to change

the size of the door opening so that the door opening corresponds in size with the size of the

compartment that is aligned with the door.

A further embodiment of the present invention is where the first basic

embodiment is modified by there being included a plurality of doors within the door vending

machine.

A further embediment of the present invention is where the first basic

embodiment is modified by having the door to be pivotally mounted on the sidewall of the

housing.

A further embodiment of the present invention is where the first basic

embodiment is modified by there being included a plurality of the first compartments.

A further embodiment of the present invention is where the just previous

embodiment is modified by the first compartments being mounted on a first carousel.

A further embodiment of the present invention is where the first basic

embodiment is modified by there being a plurality of second compartments.

A further embodiment of the present invention is where the just previous

embodiment is modified by the second compartments being mounted within a second

carousel.

Stephen M. Pixley, et al., inventors

Serial No. 10/791,991

Filed March 2, 2004

Page 4 of 16

A further embodiment of the present invention is where the first basic

embodiment is modified by the moving means drive mechanism being defined as a rack and

pinion gear assembly.

A further embodiment of the present invention is where the first basic

embodiment is modified by the baffle means being defined as a pair of plates which are

movable simultaneously in opposite directions.

A further embodiment of the present invention is where the just previous

embodiment is modified by the plates being mounted on directly adjacent the door.

A second basic embodiment of the present invention is directed to a tool

vending machine which utilizes a bin carousel assembly that has a plurality of different size

compartments with this bin carousel assembly being mounted within an internal chamber of

a housing. There is also included a user interface tool selection means for selecting a

compartment to be moved directly adjacent to and in alignment with a door mounted within

the housing. There is also included a baffle assembly mounted in conjunction with the door

with the baffle assembly to automatically adjust the size of the door opening to correspond

to the size of the compartment with it being understood that only a single compartment can

be aligned with the door at a time eliminating access to compartments that are located

directly adjacent the selected compartment. The baffle assembly comprises a pair of plates.

A further embodiment of the present invention is where the second basic

embodiment is modified by including a plurality of carousels within the bin carousel assembly.

A further embodiment of the present invention is where the second basic

Stephen M. Pixley, et al., inventors

Serial No. 10/791,991

Filed March 2, 2004

Page 5 of 16

embodiment is modified by defining the baffle assembly as comprising a plurality of plates.

A further embodiment of the present invention is where the just previous

second basic embodiment is modified by defining the plates as a pair of plates moving in

opposite directions.

A third basic embodiment of the present invention is directed to a method of

automatically extracting a tool from a compartment with there being available a plurality of

different size compartments comprising the steps of manually selecting the tool, moving the

compartments until a desired compartment is located to be manually accessible through an

opening formed in a housing which is normally closed by a door, automatically adjusting the

size of the opening to correspond to the size of the compartment only permitting the user to

extract the tool from that compartment and not permitting access to any directly adjacent

compartment and the step of automatically adjusting is accomplished by moving a plate

assembly to restrict or enlarge the opening.

A further embodiment of the present invention is where the third basic

embodiment is modified by mounting of the compartments on a series of bin carousels where

each carousel has only a single size of compartments.

A further embodiment of the present invention is where the third basic

embodiment is modified by moving of the plate assembly to restrict or enlarge the opening

that is associated with the door.

A further embodiment of the present invention is where the just previous third

basic embodiment is modified by defining of the plate assembly as a pair of plates movable

Stephen M. Pixley, et al., inventors

Serial No. 10/791,991

Filed March 2, 2004

Page 6 of 16

in opposite directions .--

Please replace the paragraph beginning at page 11, line 8, with the following

rewritten paragraph:

-- Each carousel includes a series of [[trays]] tray levels 42. There will be an

equal number of tray levels 42 to the number of doors 18. In Figure 1, there is shown ten

in number of the doors [[14]] 18. Therefore, each carousel will include ten in number of the

[[trays]] tray levels 42 in a stacked relationship. In actual practice, the vending machine 10

will have, in most instances, more than ten [[trays]] tray levels 42. Each tray level 42 is

basically circular in configuration and all the [[trays]] tray levels 42 for each carousel are

mounted on a center shaft 44 for carousel 36, a center shaft 46 for carousel 38 and a center

shaft 48 for carousel 40. Each of the center shafts 44, 46 and 48 are connected together

by a series of links 50, 52 and 54 to a plate 56. The plate 56 is attached to a mounting post

58 which in turn is supported in conjunction with the housing 12. The mounting post 58 is

connected to a cap 60 that is fixedly mounted on the housing 12.--

Please replace the paragraph beginning at page 12, line 16, with the following

rewritten paragraph:

--Let it be assumed that a human user has made a tool selection by using the

user interface tool selection of Figure 8. The information is transmitted to the microprocessor

and from the microprocessor the information is transmitted to the carousels 36, 38 and 40.

Stephen M. Pixley, et al., inventors

Serial No. 10/791,991

Filed March 2, 2004

Page 7 of 16

The carousels 36, 38 and 40 are then rotated so that the particular carousel 36, 38 and 40

that carries the selected tool is located directly adjacent the door opening 62. Observing of

the carousels 36, 38 and 40 in Figures 2 and 3, it can be seen that the tray level 42 of

carousel [[42]] 38 is divided into a series of small, pie shaped, compartments 82 (twelve in

number) with the first carousel 36 being divided into a series of intermediate sized, pie

shaped, compartments 84 (six in number) and each tray level 42 of the third carousel 40

being divided into large sized, pie shaped, compartments 86 (three in number). It is

considered to be within the scope of this invention that the size of the compartments can

readily change to be larger or smaller as per what is desired to be manufactured. It is also

considered to be within the scope of this invention that although in most instances the

carousel 38 will include only small compartments 82 with carousel 36 only including

intermediate size compartments 84 and carousel 40 including only large size compartments

86 that each carousel in and of itself may include different size compartments on different

[[trays]] tray levels 42. The compartments 86 are designed to carry a larger size tool with

compartments 84 being designed to carry only a medium size tool and compartment 86

designed to carry only a small tool .--